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DS-Stoller
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SPACE OPERATIONS CONTROL CENTER

③ GODDARD SPACE FLIGHT CENTER

① NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

② GREENBELT, MARYLAND

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Volume 1, No. 13

SATELLITE SITUATION REPORT,

August 1, 1961

The following report reflects data computed and compiled by
Goddard Space Flight Center, NORAD, and the Smithsonian Astrophysical
Observatory as of 1200Z on August 1, 1961.

Don A. Premo
DON A. PREMO
HEAD, Operations Control
and Planning Branch

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OBJECTS IN ORBIT

OBJECT	CODE NAME	SOURCE	LAUNCH	NODAL PERIOD	INCLINATION	APOGEE	PERIGEE	TRANSMITTING FREQ. (MC/S)
1958 ALPHA	EXPLORER I	US	1 FEB 58	106.4	33.21	1112	217	
1958 BETA 1	ROCKET BODY	US	17 MAR 58	138.2	34.25	2679	406	
1958 BETA 2	VANGUARD I	US	17 MAR 58	133.8	34.24	2446	404	108.022
1959 ALPHA 1	VANGUARD II	US	17 FEB 59	125.3	32.88	2045	344	
1959 ALPHA 2	ROCKET BODY	US	17 FEB 59	129.5	32.98	2274	346	
1959 DELTA	EXPLORER VI	US	7 AUG 59	POSITION UNCERTAIN				
1959 ETA	VANGUARD III	US	18 SEP 59	129.7	33.34	2314	318	
1959 MU*	LUNIK I	USSR	2 JAN 59	450D	0.01	1.3177AU	0.9766AU	
1959 NU*	PIONEER IV	US	3 MAR 59	398D	0.127	1.1421AU	0.9871AU	
1959 IOTA 1	EXPLORER VII	US	13 OCT 59	101.1	50.31	669	344	19.9904
1959 IOTA 2	ROCKET BODY	US	13 OCT 59	100.9	50.30	661	342	
1960 ALPHA*	PIONEER V	US	11 MAR 60	311.6D	3.35	.9931AU	.8061AU	
1960 BETA 1	ROCKET BODY	US	1 APR 60	99.1	48.41	464	429	
1960 BETA 2	TIROS I	US	1 APR 60	99.1	48.39	467	429	107.997
1960 BETA 3	NONE	US	1 APR 60	97.8	48.46	445	375	
1960 BETA 4	NONE	US	1 APR 60	99.8	48.46	503	434	
1960 GAMMA 1	ROCKET BODY	US	13 APR 60	89.8	51.25	165	165	
1960 GAMMA 2	TRANSIT 1B	US	13 APR 60	94.9	51.28	412	229	
1960 GAMMA 4	NONE	US	13 APR 60	96.8	51.20	468	291	
1960 EPSILON 1	SPUTNIK IV	USSR	15 MAY 60	92.4	65.02	312	175	
1960 EPSILON 3	NONE	USSR	15 MAY 60	93.3	64.89	368	172	
1960 EPSILON 4	NONE	USSR	15 MAY 60	POSITION UNCERTAIN				
1960 ZETA 1	MIDAS II	US	24 MAY 60	94.3	33.00	314	297	
1960 ETA 1	TRANSIT 2A	US	22 JUN 60	101.6	66.77	649	389	162;216;108.06
1960 ETA 2	GREB	US	22 JUN 60	101.6	66.77	657	381	
1960 ETA 3	ROCKET BODY	US	22 JUN 60	101.4	66.77	643	383	
1960 IOTA 1	ECHO I	US	12 AUG 60	116.9	47.26	1073	848	
1960 IOTA 2	ROCKET BODY	US	12 AUG 60	118.0	47.22	1049	932	
1960 IOTA 3	METAL OBJECT	US	12 AUG 60	118.2	47.20	1050	941	
1960 IOTA 4	METAL OBJECT	US	12 AUG 60	118.2	47.37	1045	950	
1960 IOTA 5	METAL OBJECT	US	12 AUG 60	118.3	47.20	1060	940	
1960 NU 1	COURIER 1B	US	4 OCT 60	106.9	28.30	750	604	107.9709

OBJECTS IN ORBIT (CONT'D)

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>NODAL PERIOD</u>	<u>INCLINATION</u>	<u>APOGEE</u>	<u>PERIGEE</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
1960 NU 2	ROCKET BODY	US	4 OCT 60	106.4	28.30	762	565	
1960 XI 1	EXPLORER VII	US	3 NOV 60	112.5	49.98	1411	262	
1960 XI 2	ROCKET BODY	US	3 NOV 60	112.4	49.98	1406	259	
1960 XI 3	NONE	US	3 NOV 60	111.5	49.98	1363	250	
1960 XI 4	NONE	US	3 NOV 60	112.1	49.98	1388	262	
1960 PI 1	TIROS II	US	23 NOV 60	98.2	48.57	461	378	108.0;108.3
1960 PI 2	ROCKET BODY	US	23 NOV 60	98.1	48.57	456	378	
1960 PI 3	NONE	US	23 NOV 60	98.1	48.57	442	394	
1960 PI 4	NONE	US	23 NOV 60	98.3	48.57	462	383	
1961 ALPHA 1	SAMOS II	US	31 JAN 61	94.9	97.40	342	295	
1961 ALPHA 2	METAL OBJECT	US	31 JAN 61	94.9	97.40	341	295	
1961 GAMMA 1*	VENUS PROBE	USSR	12 FEB 61	300D	0.581	1.0190AU	0.7183AU	
1961 DELTA 1	EXPLORER IX	US	16 FEB 61	118.1	38.86	1562	431	
1961 DELTA 2	ROCKET BODY	US	16 FEB 61	118.4	38.63	1611	395	
1961 DELTA 3	NONE	US	16 FEB 61	118.1	38.87	1554	437	
1961 DELTA 4	NONE	US	16 FEB 61	POSITION UNCERTAIN				
1961 EPSILON 1	DISCOVERER XX	US	17 FEB 61	94.3	80.91	422	176	
1961 EPSILON 4	NONE	US	17 FEB 61	94.6	80.91	385	231	
1961 ZETA	DISCOVERER XXI	US	18 FEB 61	95.7	80.74	531	154	
1961 KAPPA	EXPLORER X	US	25 MAR 61	POSITION UNCERTAIN				
1961 LAMBDA 1	DISCOVERER XXIII	US	8 APR 61	93.3	82.31	356	183	
1961 LAMBDA 2	CAPSULE	US	8 APR 61	99.6	81.94	789	126	
1961 LAMBDA 3	NONE	US	8 APR 61	95.1	81.94	523	124	
1961 NU	EXPLORER XI	US	27 APR 61	107.8	28.80	1107	302	108.058
1961 OMICRON 1	TRANSIT 4A	US	29 JUN 61	103.8	67.0	620	547	
1961 OMICRON 2	INJUN-SR-3	US	29 JUN 61	103.8	67.0	619	548	136.5;108.09
1961 OMICRON 3-42**	METAL OBJECTS	US	29 JUN 61					
1961 PI	DISCOVERER XXVI	US	8 JUL 61	94.3	82.93	454	142	
1961 RHO 1	TIROS III	US	12 JUL 61	100.3	47.90	511	457	108.0;108.03
1961 RHO 2	ROCKET BODY	US	12 JUL 61	100.3	47.90	508	457	
1961 SIGMA 1	MIDAS III	US	12 JUL 61	161.5	91.17	2197	2084	

*APHELION, PERIHELION IN ASTRONOMICAL UNITS, INCLINATION TO ECLIPTIC.

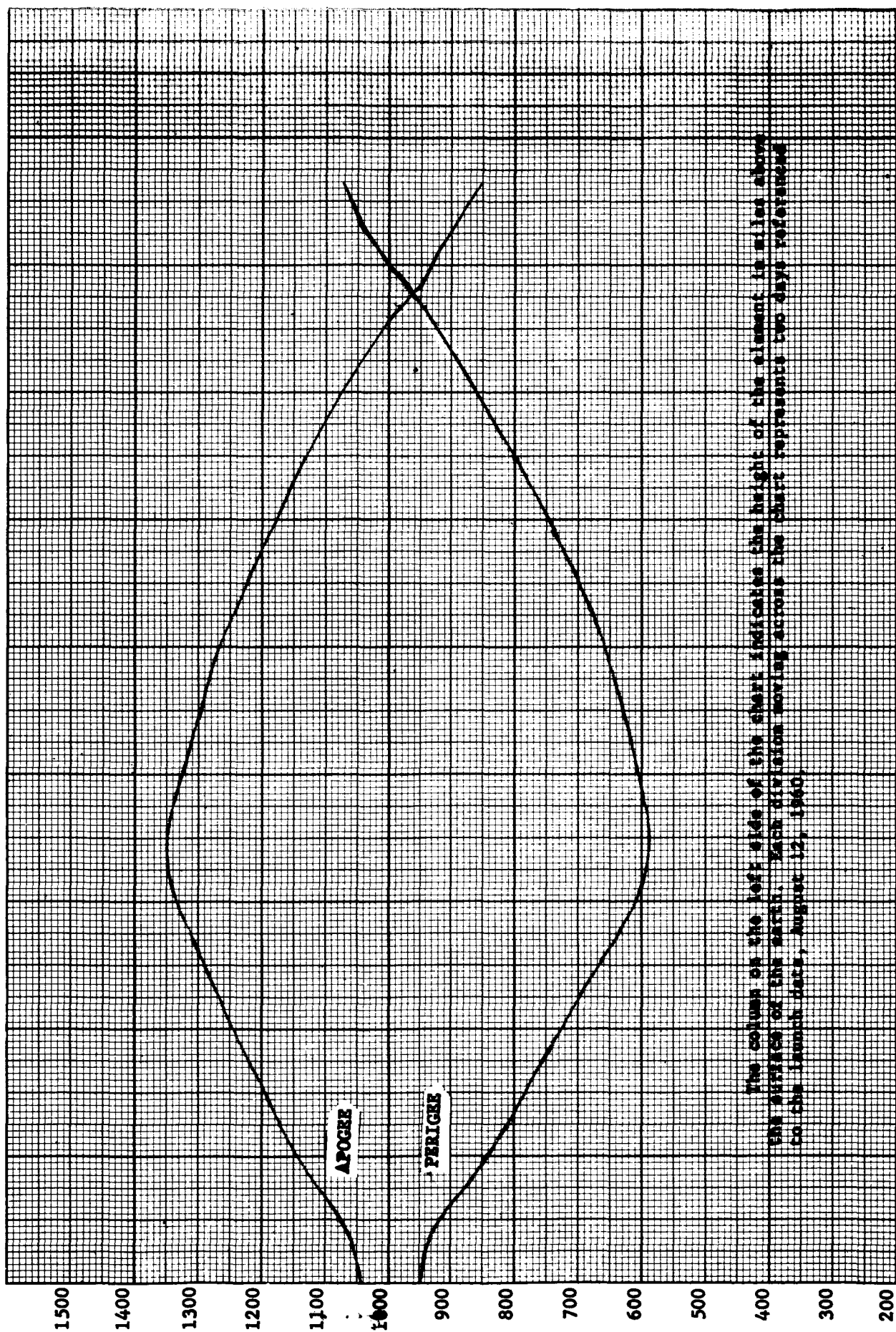
**FORTY METAL OBJECTS HAVE BEEN IDENTIFIED IN THE PLANE OF THE 1961 OMICRON 1 AND 1961 OMICRON 2 ORBITS.

PLEASE ADD THE FOLLOWING TO THE DECAYED OBJECTS LIST:

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>DECAY</u>
1961 SIGMA 2	METAL OBJECT	US	12 JUL 61	24 JUL 61

1960 IOTA (ECHO)

Aug. 12 '60	Sep. 21	Oct. 31	Dec. 10	Jan. 19 '61	Feb. 28	Apr. 9	May 19	Jun. 28	Aug. 7	Sep. 16
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The column on the left side of the chart indicates the height of the element in miles above the surface of the earth. Each division moving across the chart represents two days referenced to the launch date, August 12, 1960.

CHART I. APOGEE - PERIGEE VS. TIME